

Preventing Lead Exposure at Child-Occupied Facilities

November 27, 2001

Definitions to Know

- **Child-Occupied Facility** - any building, or portion of a building constructed prior to 1978, visited regularly by the same child, 6 years of age or under, on at least two different days within any week (Sunday through Saturday period), provided that each visit lasts at least 3 hours and the combined weekly visit lasts at least 6 hours, and the combined annual visits last at least 60 hours.
Child-occupied facilities may include, but are not limited to, day-care centers, preschools, and kindergarten/first grade class rooms.

Definitions to know

- Abatement - any measure or set of measures designed to permanently eliminate lead-based paint hazards.
- Interim Controls - means a set of measures designed to temporarily reduce human exposure or likely exposure to lead-based paint hazards.
- Paint Stabilization - repairing any physical defect in the substrate of a painted surface that is causing paint deterioration, removing the loose paint and other material from the surface, and applying a new protective coating or paint.

Sources of Children's Lead Exposure

- Deteriorating lead-based paint in homes or other buildings frequented.
- Lead contaminated dust and paint chips from renovation/remodeling activities.
- Folk medicines
- Pottery
- Parent's job or hobbies.
- Soil contamination from business/industry.
- Some plastic mini-blinds.

Health Effects of Lead Poisoning

- Damage to brain and nervous system.
- Behavior and learning problems.
- Slowed growth.
- Hearing problems.
- Headaches.

Society's Costs

- Special education costs as children.
- Lost lifetime earnings costs as adults.
- Medical intervention costs.

What is a lead-dust hazard?

- A lead dust hazard is surface dust in a residential dwelling or child-occupied facility that contains a mass-per-area concentration of lead equal to or exceeding 40 ug/ft² on floors or 250 ug/ft² on interior window sills based on wipe samples.
- Floor standard applies to uncarpeted and carpeted floors.

What is a soil-lead hazard?

- A soil-lead hazard is bare soil on residential real property or on the property of a child-occupied facility that contains total lead equal to or exceeding 400 ppm in a play area, or average 1200 ppm of bare soil in the rest of the yard based on soil samples.

What is a Lead-Based Paint Hazard?

- Any lead-based paint on a friction surface that is subject to abrasion and where the lead dust levels on the nearest horizontal surface underneath the friction surface (window sill, or floor) are equal to or greater than the dust-lead hazard levels for window sills and floors.
- Any damaged or otherwise deteriorated lead-based paint on an impact surface that is caused by impact from a related building component.
- Any chewable lead-based painted surface on which there is evidence of visible teeth marks.
- Any other deteriorated lead-based paint in any residential building or child-occupied facility or on the exterior of any residential building or child-occupied facility.

Abatement Mandates?

- There is no EPA mandate in the rule to abate lead-based paint in target housing or child-occupied facilities.
- In the State of Texas, the Texas Department of Health requires all individuals and contractors who perform lead-based paint inspections, risk assessments, and abatements in target housing and child-occupied facilities to be certified.

Paint Deterioration Solutions

- EPA recognizes that paint stabilization or interim controls are often the most appropriate methods to address lead-based paint hazards of less than:
 - (1) Two square feet of deteriorated lead-based paint per room or equivalent;
 - (2) Twenty square feet of deteriorated paint on the exterior of a building, or
 - (3) Ten percent of the total surface area of deteriorated paint on an interior or exterior type of component with a small surface area.
- Abatement

Dust Clearance Levels

- The clearance levels for lead in dust are 40 ug/ft² for floors, 250 ug/ft² for interior window sills, and 400 ug/ft² for window troughs.

Questions

- Do most kids with elevated blood lead levels eat paint chips?
- What renovation activities create the most lead dust?
- Do most renovation contractors determine whether they are leaving lead dust hazards upon completion of their work?
- Do broom or shop vacuums adequately clean lead dust after renovation & remodeling?
- Lead Inspection or Lead Risk Assessment?